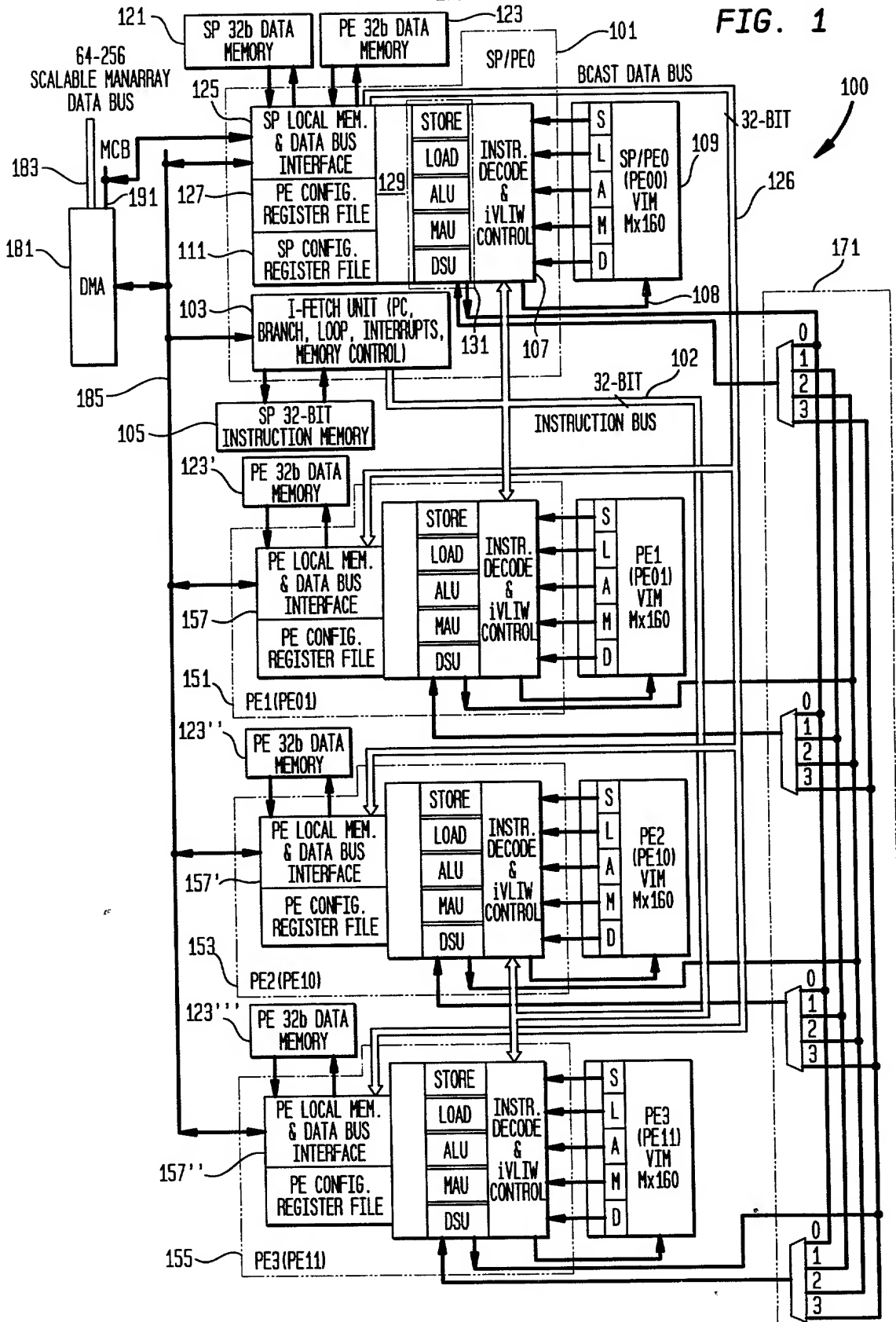


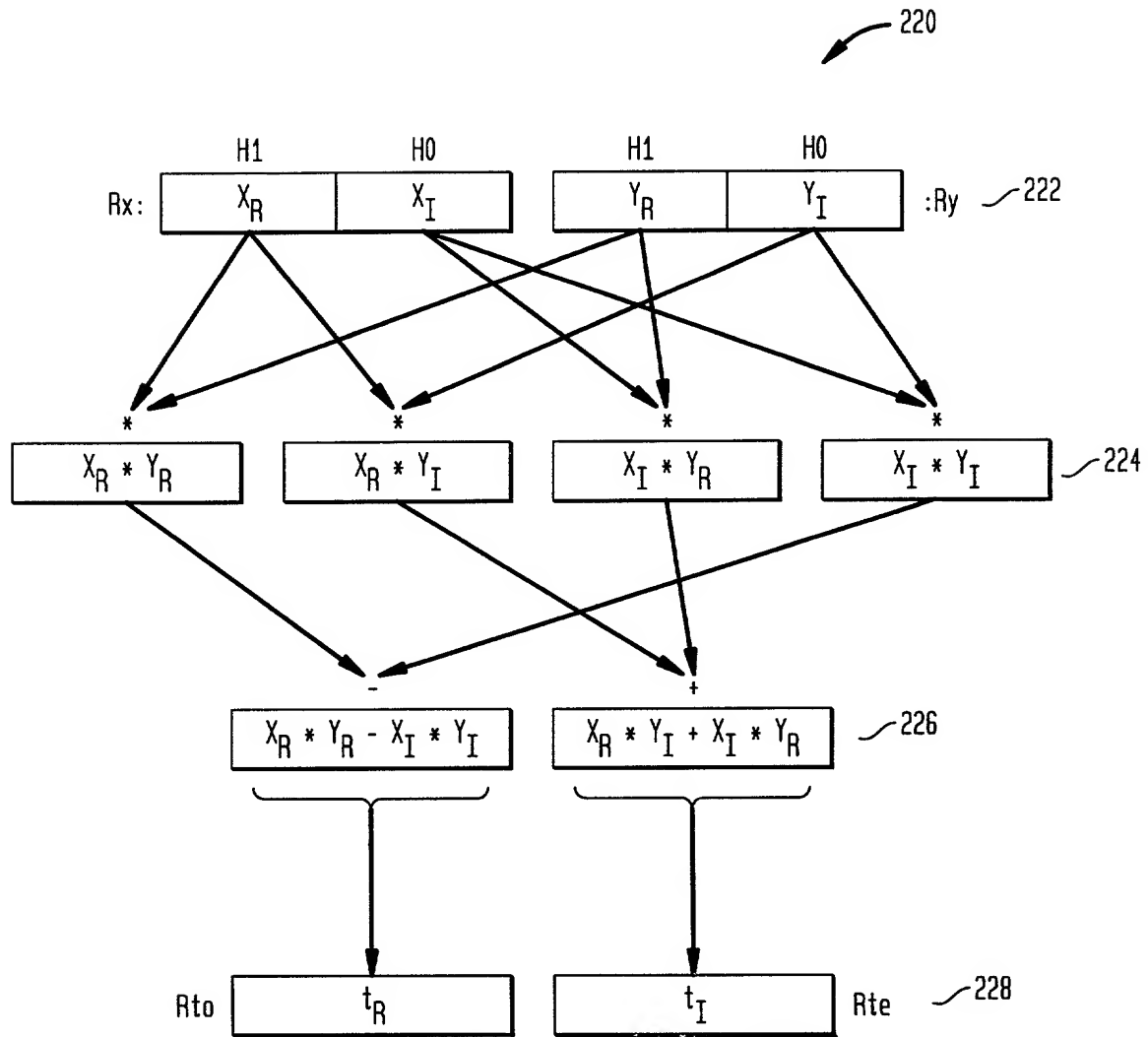
1/21

FIG. 1



3/21

FIG. 2C



4/21

FIG. 3A

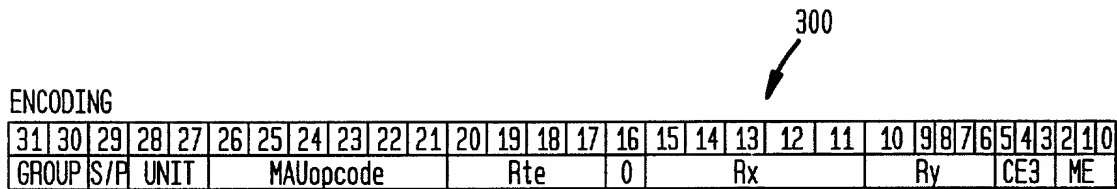


FIG. 3B

310

SYNTAX/OPERATION

INSTRUCTION	OPERANDS	OPERATION	ACF
			DUAL HALFWORDS
MPYCXJL.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXJL.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow (Rx.H1 * Ry.H1 + Rx.H0 * Ry.H0)$ $Rte \leftarrow (Rx.H0 * Ry.H1 - Rx.H1 * Ry.H0)$	F1 F0
[TF].MPYCXJL.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte) OR AS SPECIFIED)

C = NOT AFFECTED

N = MSB OF RESULT

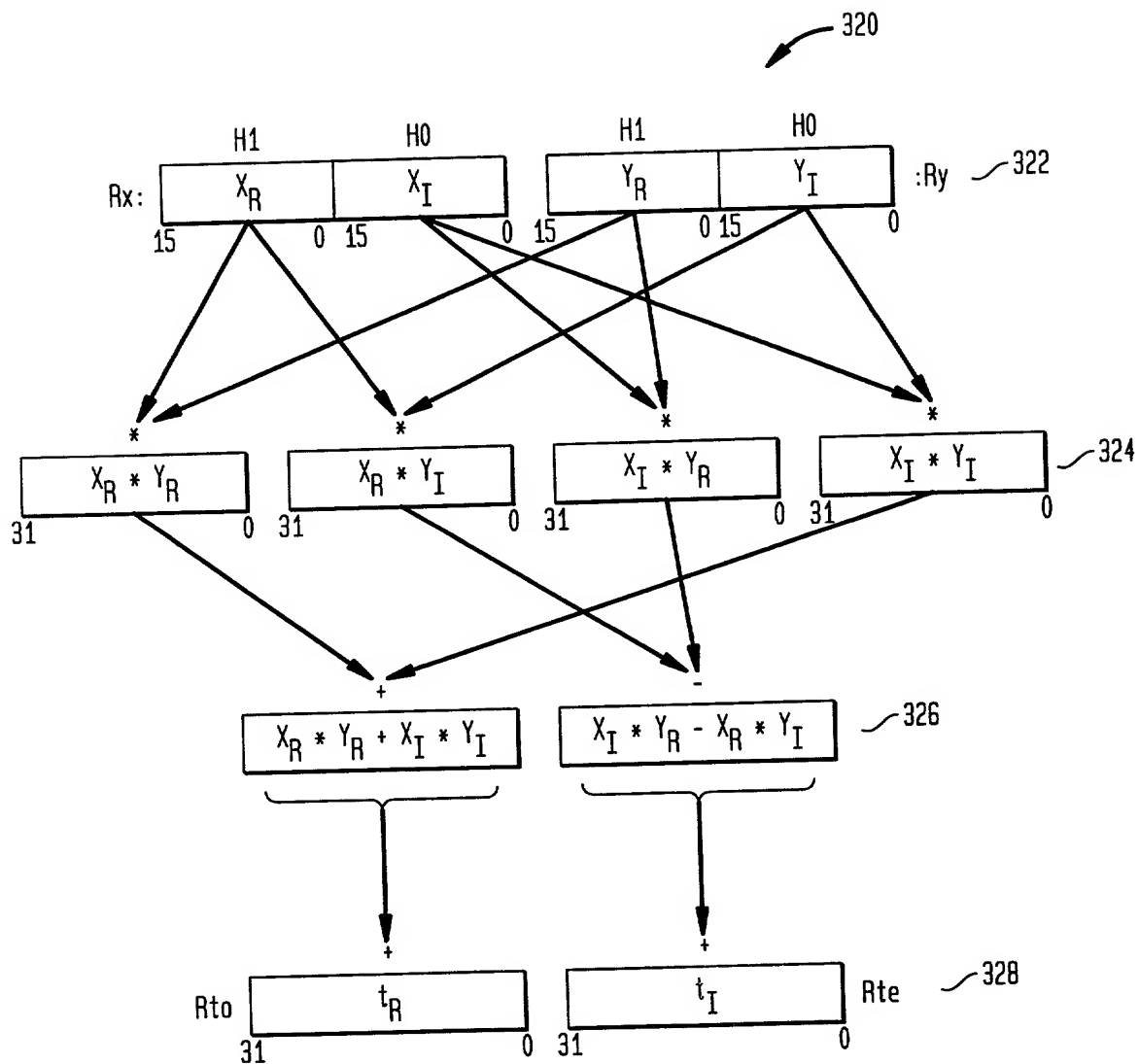
V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE

Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE

CYCLES: 2

5/21

FIG. 3C



6/21

FIG. 4A

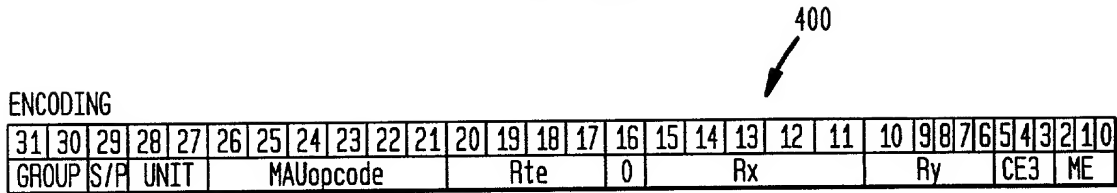


FIG. 4B

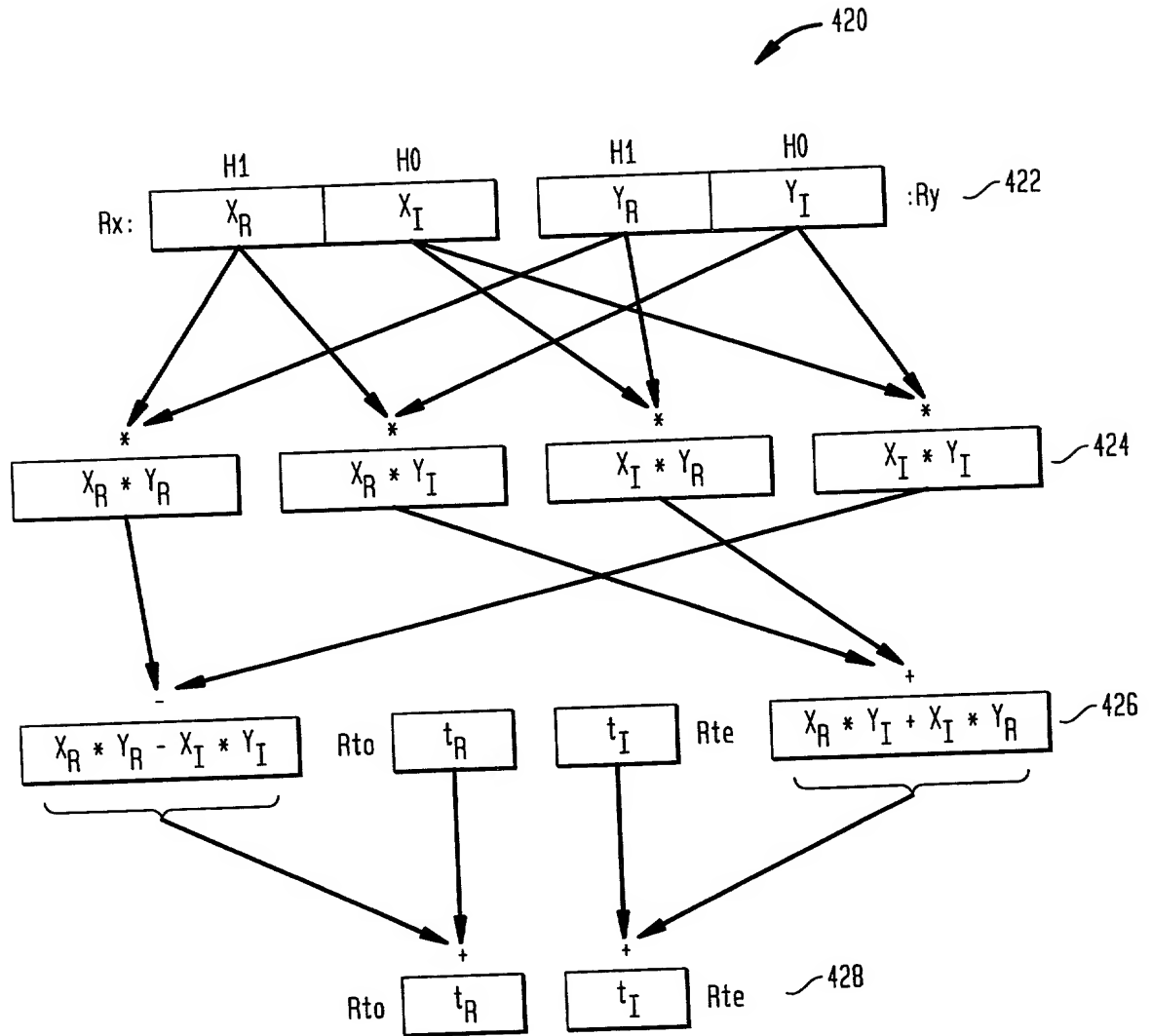
SYNTAX/OPERATION

INSTRUCTION	OPERANDS	OPERATION	ACF
DUAL HALFWORDS			
MPYCXLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXLA.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow Rto + (Rx.H1 * Ry.H1 - Rx.H0 * Ry.H0)$ $Rte \leftarrow Rte + (Rx.H1 * Ry.H0 + Rx.H0 * Ry.H1)$	F1 F0
[TF].MPYCXLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte))
C = NOT AFFECTED
N = MSB OF RESULT
V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE
Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE
CYCLES: 2

7/21

FIG. 4C



8/21

FIG. 5A

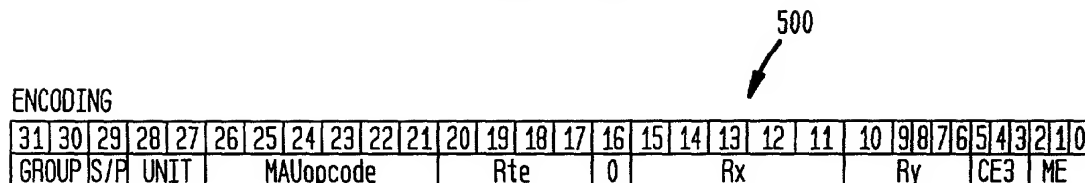


FIG. 5B

SYNTAX/OPERATION

510

INSTRUCTION	OPERANDS	OPERATION	ACF
			DUAL HALFWORDS
MPYCXJLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION BELOW BUT DO NOT AFFECT ACFs	NONE
MPYCXJLA.[NVZ].[SP]M.2SH	Rte, Rx, Ry	$Rto \leftarrow Rto + (Rx.H1 \times Ry.H1 + Rx.H0 \times Ry.H0)$ $Rte \leftarrow Rte + (Rx.H0 \times Ry.H1 + Rx.H1 \times Ry.H0)$	F1 F0
[TF].MPYCXJLA.[SP]M.2SH	Rte, Rx, Ry	DO OPERATION ONLY IF T/F CONDITION IS SATISFIED IN ACFs	NONE

ARITHMETIC SCALAR FLAGS AFFECTED (ON THE LEAST SIGNIFICANT OPERAND (Rte))

C = NOT AFFECTED

N = MSB OF RESULT

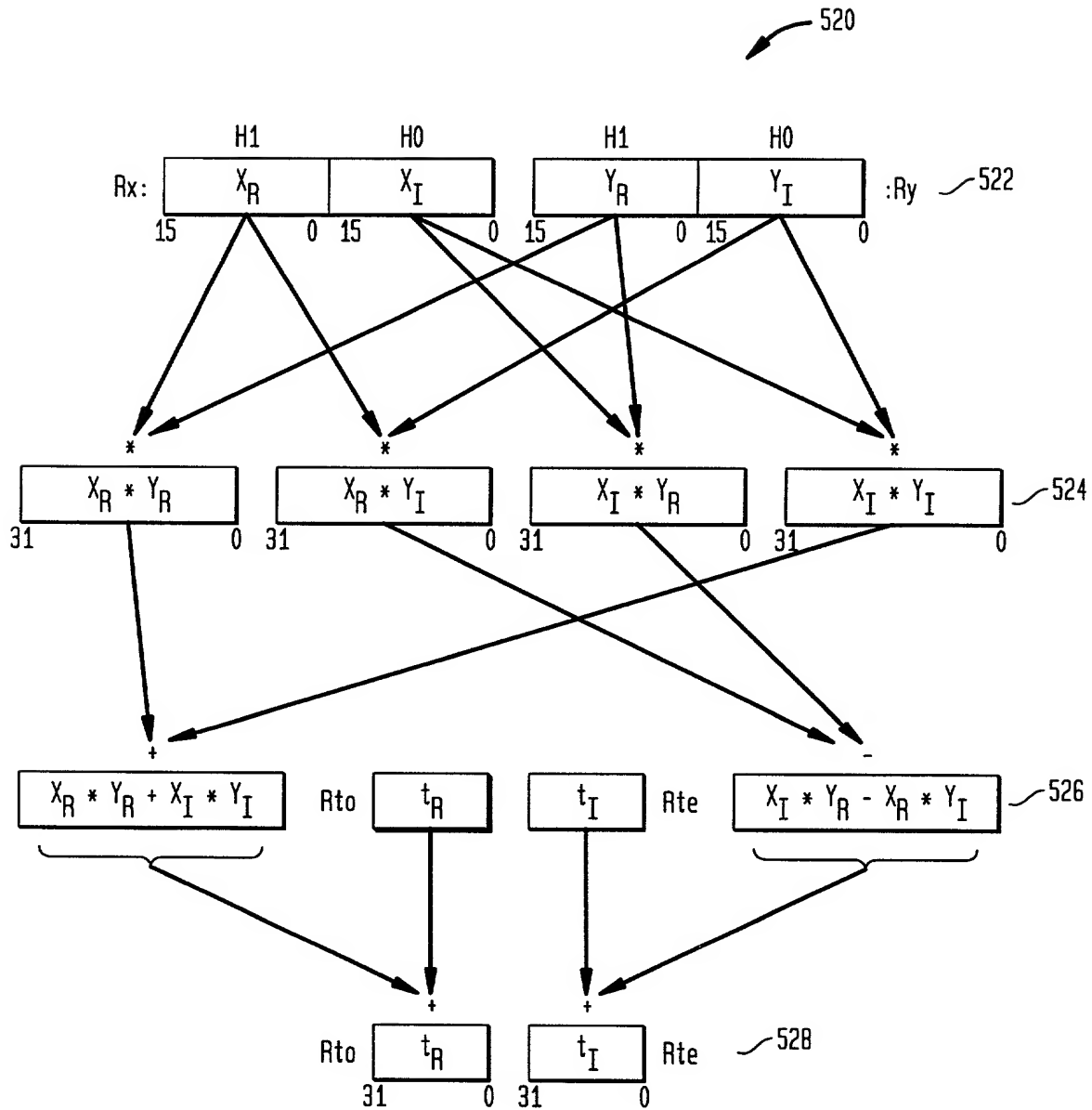
V = 1 IF AN INTEGER OVERFLOW OCCURS ON EITHER RESULT, 0 OTHERWISE

Z = 1 IF A ZERO RESULT IS GENERATED, 0 OTHERWISE

CYCLES: 2

9/21

FIG. 5C



11/21

FIG. 6C

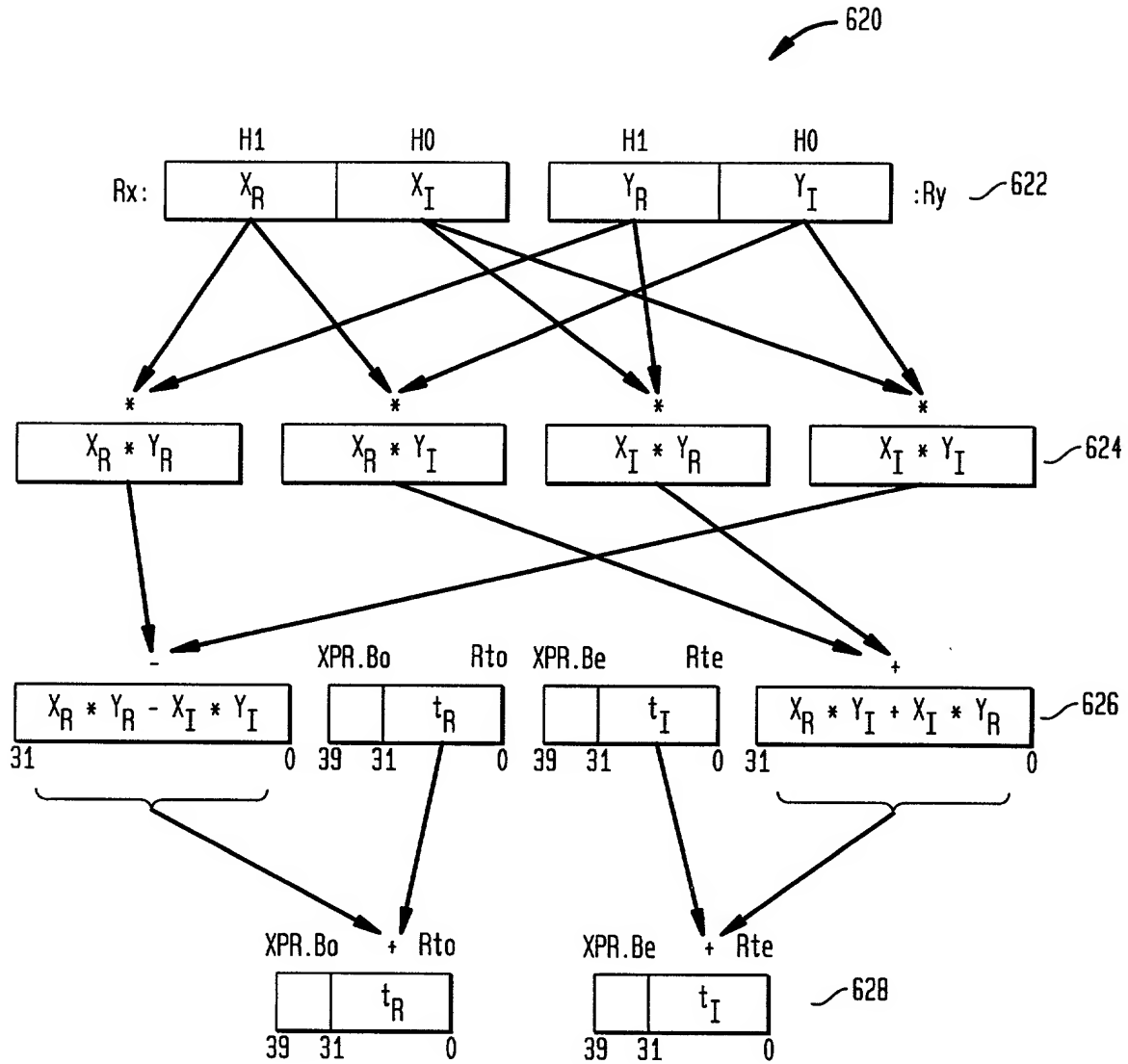
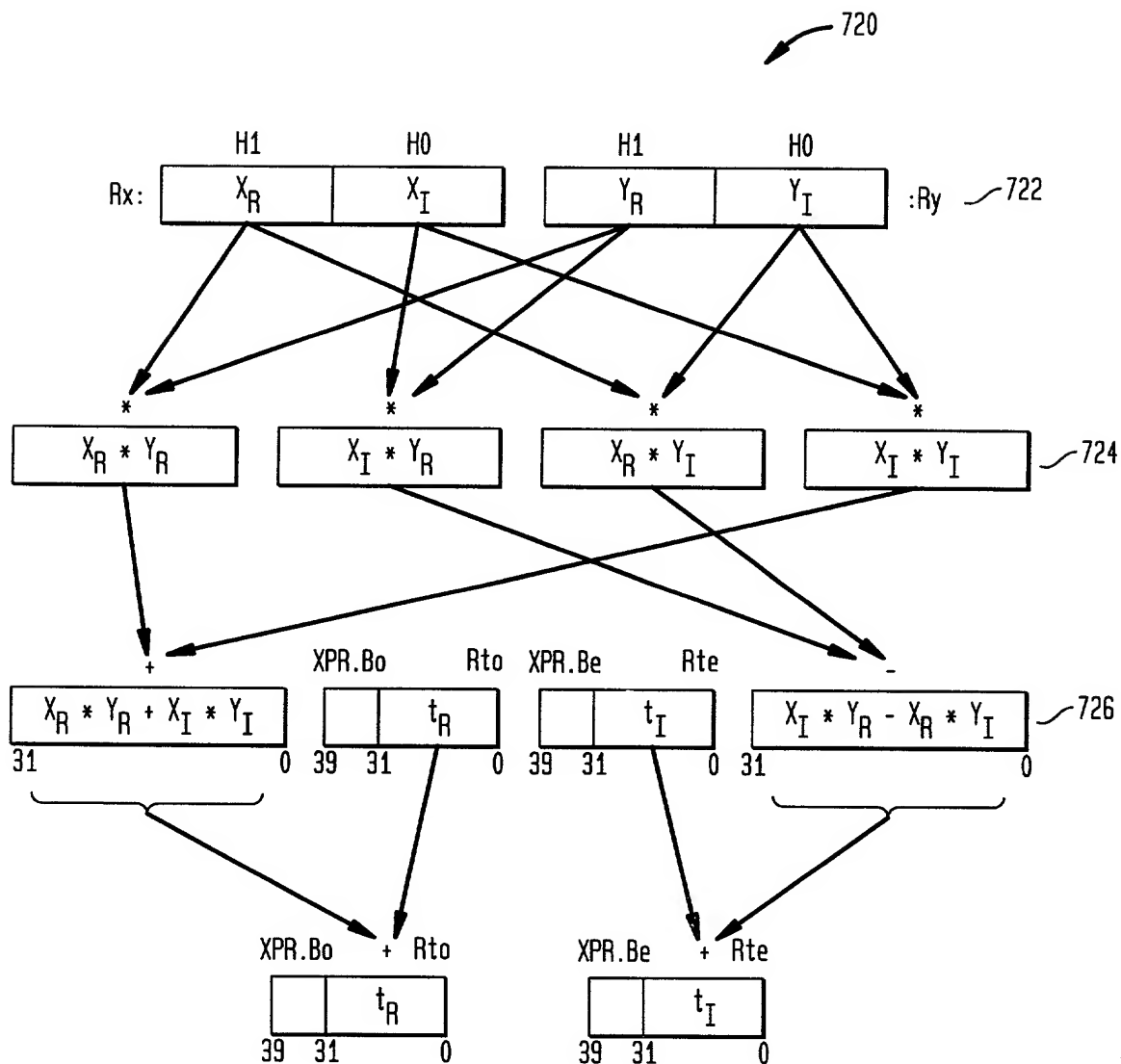


FIG. 7C



14/21

FIG. 8

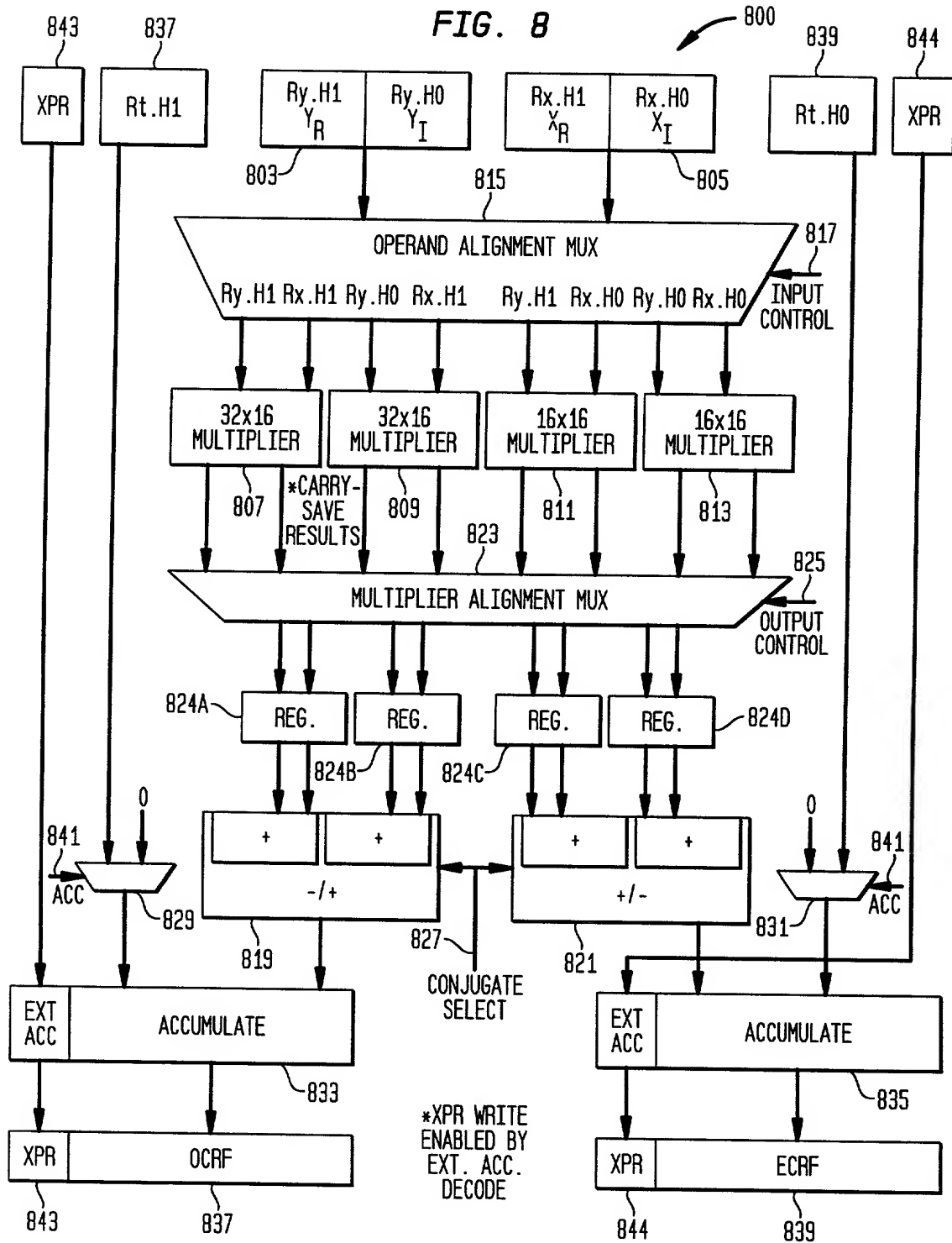


FIG. 9

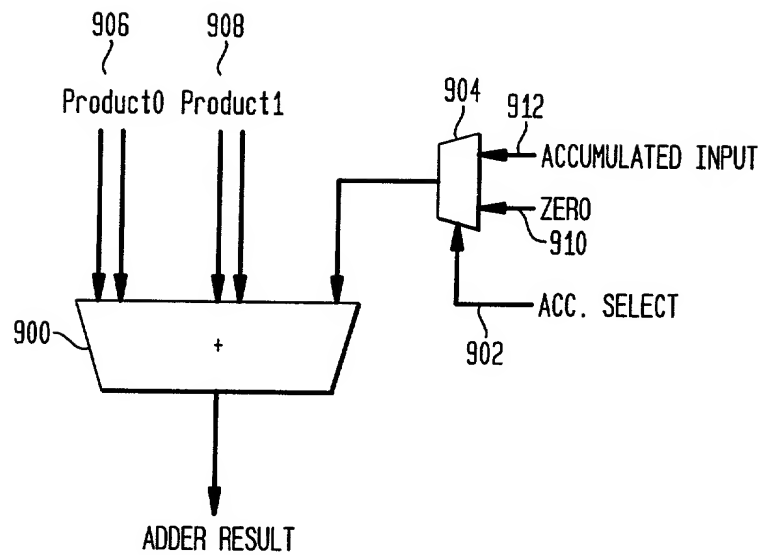


FIG. 10

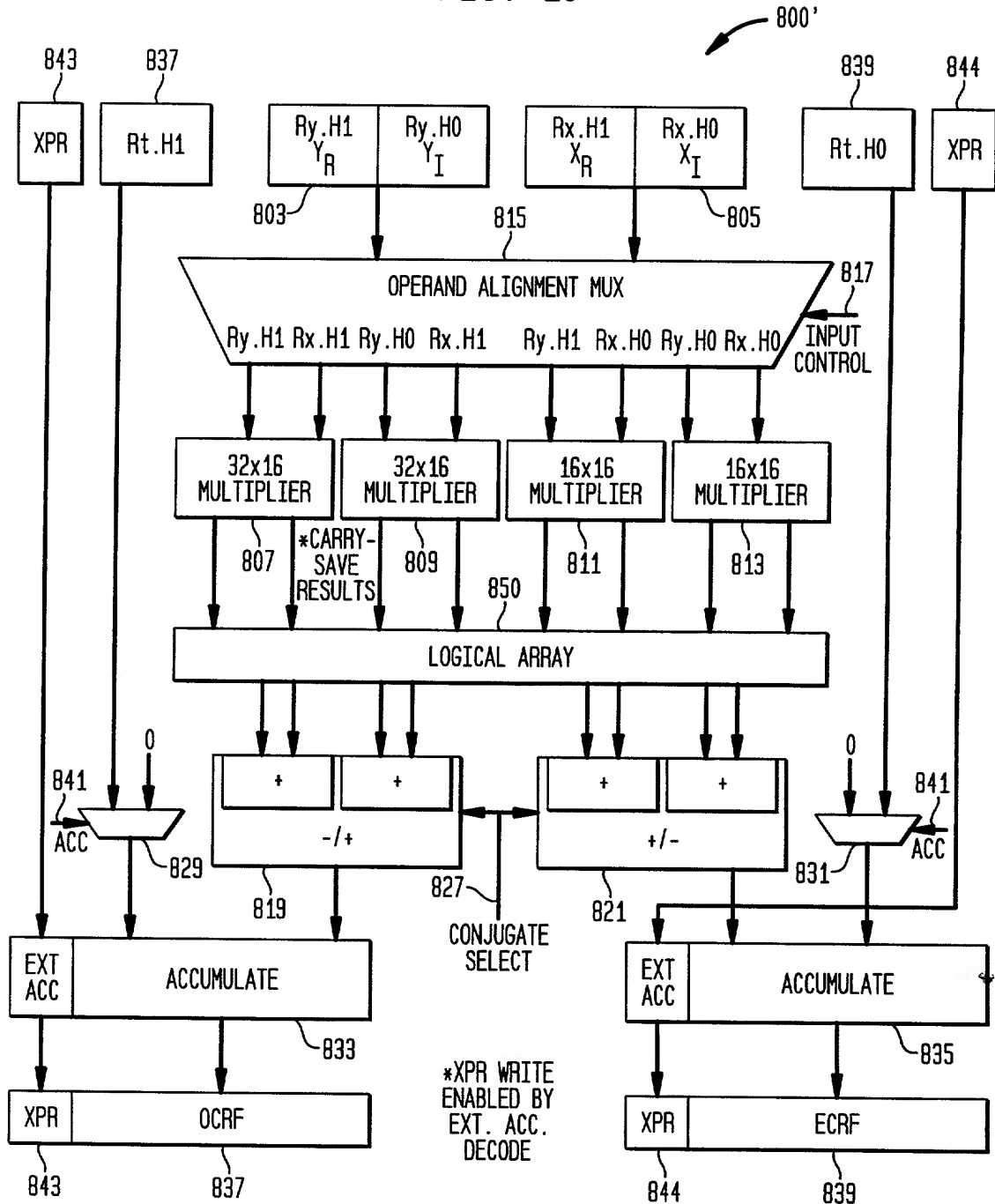


FIG. 11A

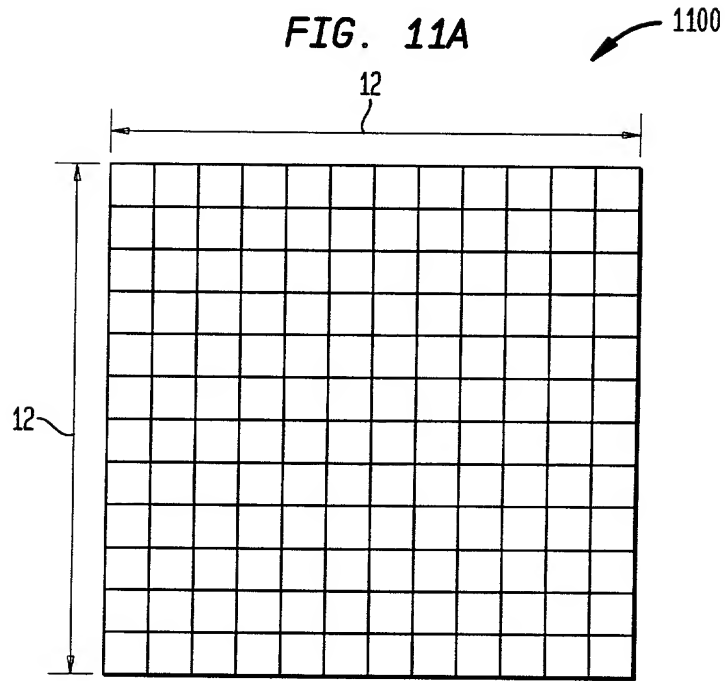


FIG. 11B

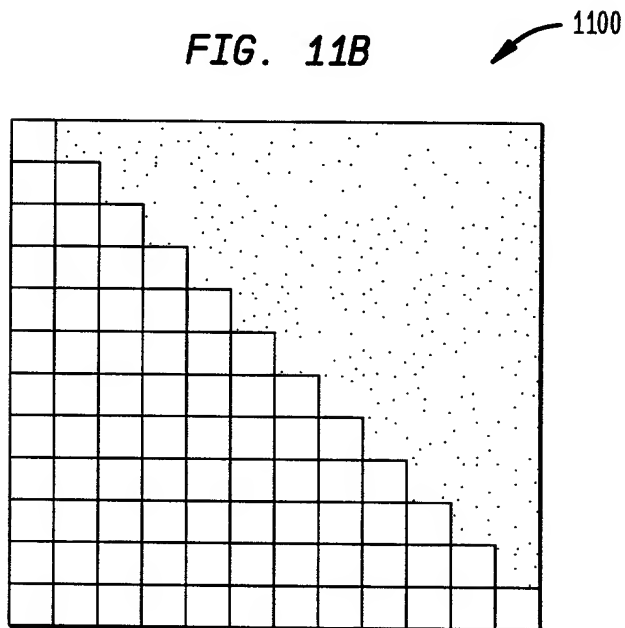


FIG. 11C

1100

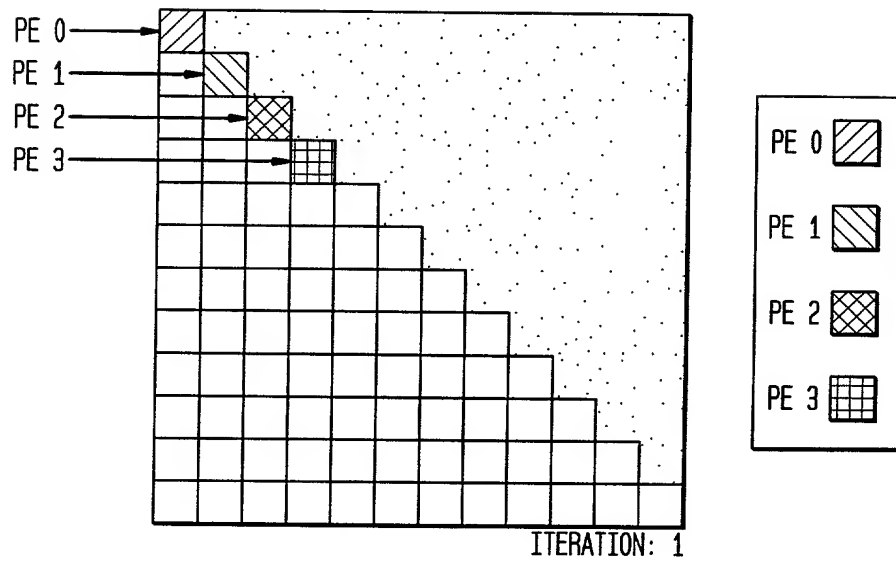
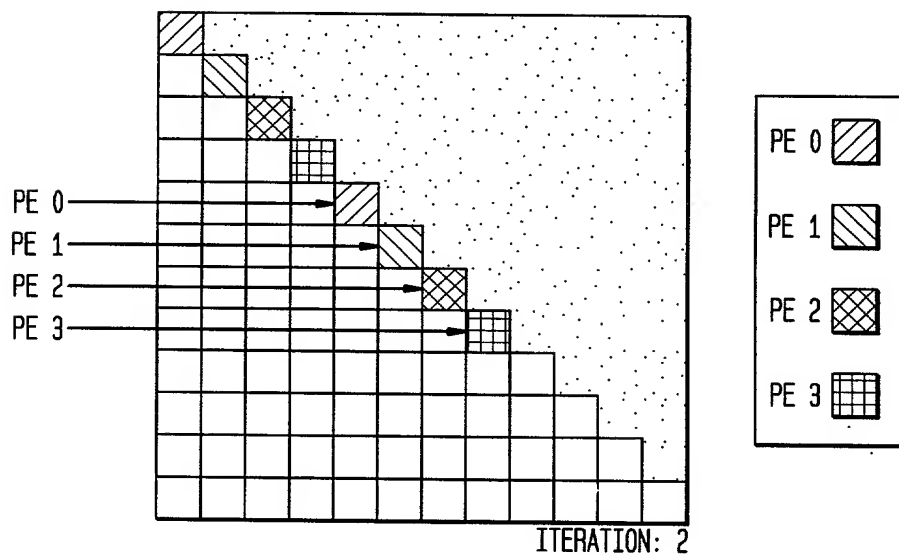


FIG. 11D

1100



19/21

FIG. 11E

1100

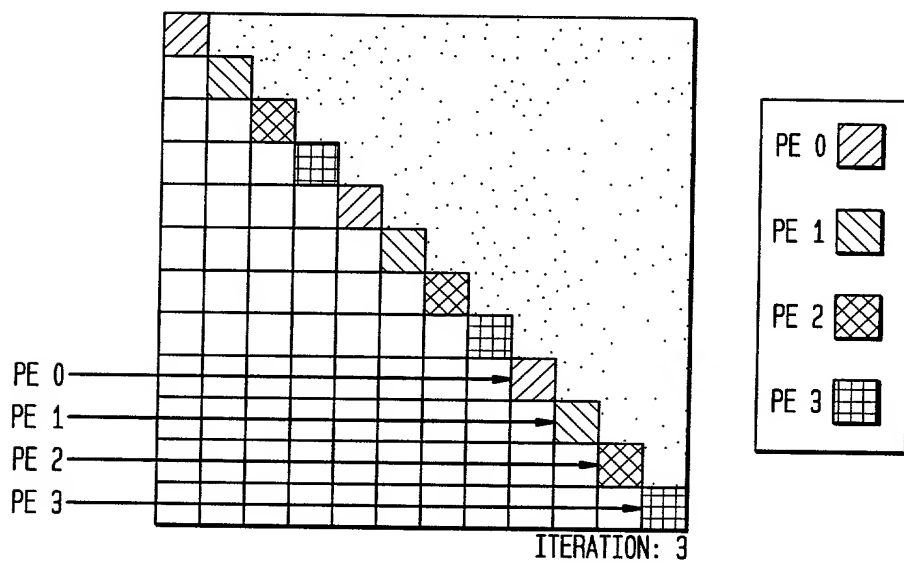
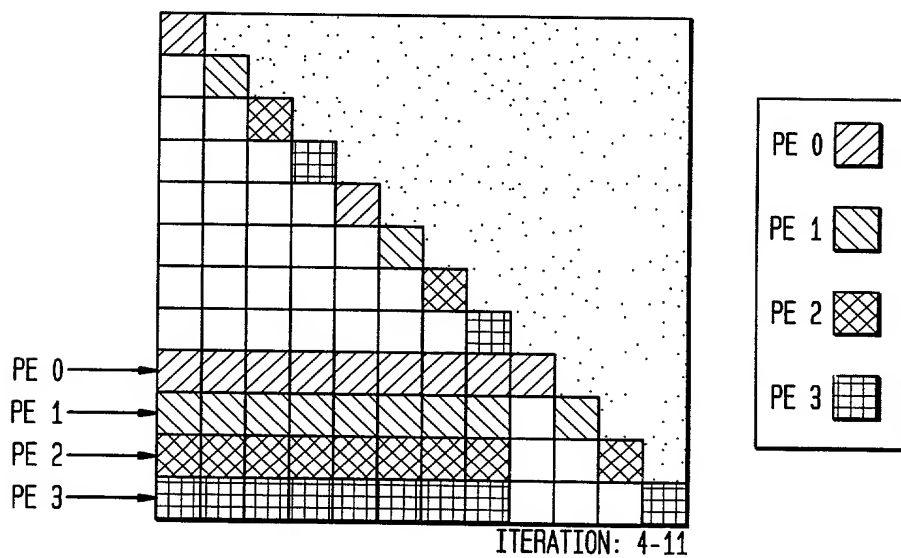


FIG. 11F

1100



20/21

FIG. 11G

1100

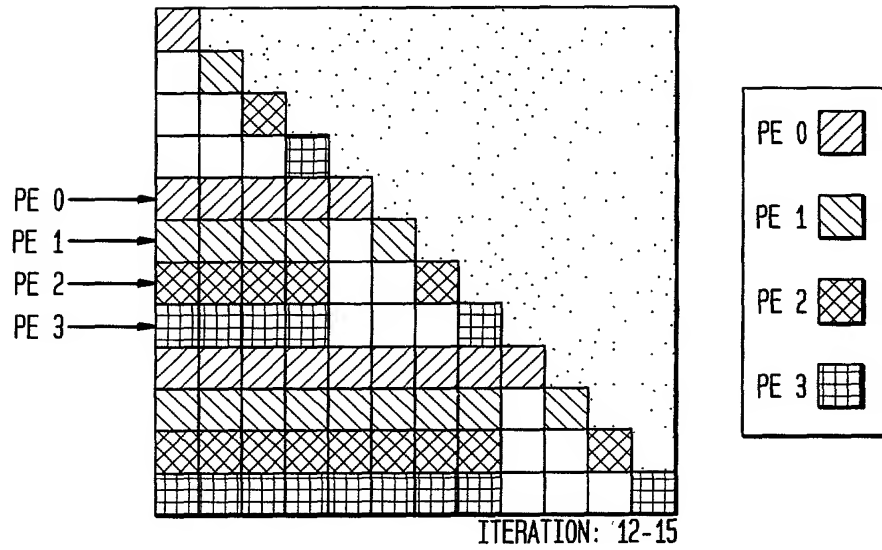


FIG. 11H

1100

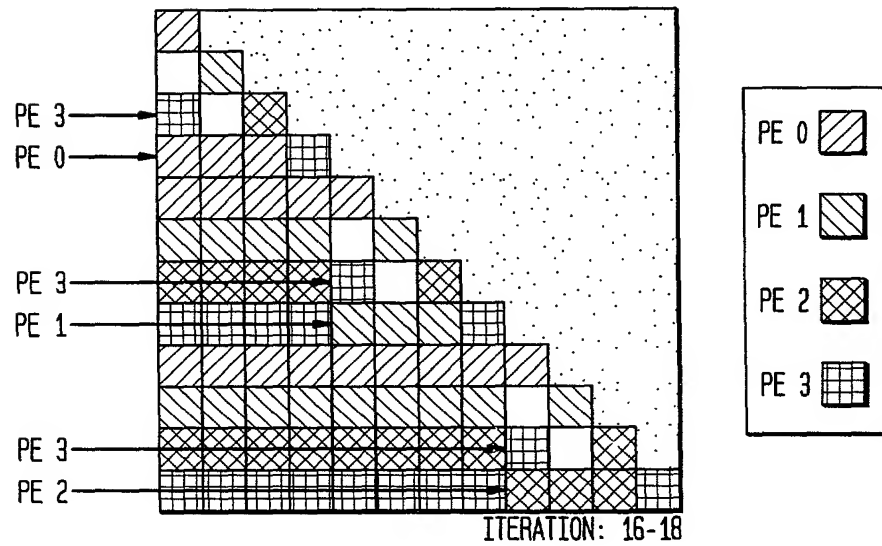


FIG. 11I

1100

